

Appl. No. : 10/007,797
Filed : November 7, 2001

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for brazing aluminum alloy-assembled articles within a short period of time, which comprises brazing aluminum alloy-assembled articles with a filler alloy of Al-Si-Cu-Zn series consisting essentially of two or more of the elements Al, Si, Cu, and Zn and having a liquidus temperature of 540°C or lower and a difference of temperature between the liquidus and the solidus temperature being 100°C or lower, wherein the highest temperature reached in the assembled articles at the time of heating for brazing is set 40°C or more higher than the liquidus temperature but 585°C or lower.

2. (Original) The method for brazing aluminum alloy-assembled articles within a short period of time according to claim 1, wherein elevation of the temperature after exceeding the liquidus temperature is continued without keeping the article at a fixed temperature.

3. (Original) The method for brazing aluminum alloy-assembled articles within a short period of time according to claim 1 or 2, wherein a vacuum brazing method or a NB method is carried out in nitrogen gas atmosphere with flux of Cs series as non-corrosive flux.

4. (Currently Amended) The method for brazing aluminum alloy-assembled articles within a short period of time ~~according to any one of claims 1 to 3~~, wherein an Al alloy having a liquidus temperature of 540°C or lower and a difference of temperature between the liquidus and the solidus temperature being 100°C or lower and containing approximately 6.0 wt % of Si, 25.0 wt % of Cu, and 5.0 wt % of Zn is used as the filler alloy, wherein the highest temperature reached in the assembled articles at the time of heating for brazing is set 40°C or more higher than the liquidus temperature but 585°C or lower.

5-6. (Previously Cancelled)

7. (Currently Amended) ~~The method of Claim 1~~, A method for brazing aluminum alloy-assembled articles within a short period of time, which comprises brazing aluminum alloy-assembled articles with a filler alloy of Al-Si-Cu-Zn series having a liquidus temperature of

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540°C or lower and a difference of temperature between the liquidus and the solidus temperature being 100°C or lower, wherein the highest temperature reached in the assembled articles at the time of heating for brazing is set 40°C or more higher than the liquidus temperature but 585°C or lower wherein the filler alloy is usable at low temperature for brazing, and comprises Si in an amount of 4.0 wt % or more but less than 8.0 wt %, Zn in an amount of 7.0 wt % or more but 20.0 wt % or less and Cu in an amount of 10.0 wt % or more but 35.0 wt % or less, with the balance being made of aluminum and any unavoidable impurities.

8. (Currently Amended) ~~The method of Claim 1,~~ A method for brazing aluminum alloy-assembled articles within a short period of time, which comprises brazing aluminum alloy-assembled articles with a filler alloy of Al-Si-Cu-Zn series having a liquidus temperature of 540°C or lower and a difference of temperature between the liquidus and the solidus temperature being 100°C or lower, wherein the highest temperature reached in the assembled articles at the time of heating for brazing is set 40°C or more higher than the liquidus temperature but 585°C or lower wherein the filler alloy is usable at low temperature for brazing, and comprises Si in an amount of 5.0 wt % or more but less than 7.0 wt %, Zn in an amount of 9.0 wt % or more but 20.0 wt % or less and Cu in an amount of 19.0 wt % or more but 27.0 wt.% or less, with the balance being made of aluminum and any unavoidable impurities.